

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Rudolf KODES

Serial No. 09/889,666

Group Art Unit: 2123

Confirmation No. 6964

Filed: September 25, 2001

Examiner: Dr. Kandasamy Thangavelu

For: METHOD AND DEVICE FOR PRETREATMENT

APPELLANT'S BRIEF IN REPLY UNDER 37 C.F.R. § 41.41

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Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

Sir:

In response to the Examiner's Answer mailed November 21, 2008 in the above-identified application, Appellant submits this Reply Brief.

(9) GROUNDS OF REJECTION

The grounds of rejection listed in section 9, at pages 3-6 of the Examiner's Answer mailed November 21, 2008 (hereinafter "the Examiners Answer") are substantially similar to those that were listed in the final Office Action mailed April 7, 2008, with the exception of the absence of the section entitled "Claim Interpretations," and have been addressed already in the Appeal Brief.

(10) RESPONSE TO ARGUMENTS

1. Response to argument that independent claims 5, 6, 7, 9, 11, 20 and 21 are described within the meaning of 35 U.S.C. § 112, first paragraph.

The Examiner asserts in section 10.1.1, at the bottom of page 10, and continuing at the top of page 11 of the Examiner's Answer, that:

The specification describes at Para 003, engineering process having units having relationships; at Para 006, a first unit, a set of second units and a third unit; a second unit connected to a first unit; a third unit determined from the second units, which has a relationship with the first unit; at Para 0011, that **the third unit can be a predecessor or successor of the first unit**; at Para 0013, that units represent activities or results of the activities; a set of activities being able to act on an event; an event being a precondition for a plurality of activities; at Para 0031, that units are embodied as activities or results; at Para 0033, that **activities have direct predecessors and direct successors**; the predecessor results are illustrated; at Para 0035, that **connection criteria includes predecessors and successors**; units of different type are results and activities; at Para 0037, selecting a plurality of first units for which third units are determined from second units; at Para 0038, results are selected and all the following activities are determined; **results being predecessors of activities; activities give rise to results.**

Here, the Examiner looks to the specification for support of alternative language, such as predecessor and successor events, and ignores language describing a cause-and-effect relationship. The specification can disclose *other* technologies besides the "cause and effect relationship" cited in the claims, and *still* show support for a "cause and effect relationship." The two are not mutually exclusive.

The Examiner, for example, summarizes paragraph [0013] of the specification of record, which corresponds to lines 1-19 at page 3 of the English translation of the International Application PCT/DE00/00075 (hereinafter "the International Application"), above as showing "that units represent activities or results of the activities; a set of activities being able to act on an

event; an event being a precondition for a plurality of activities." Paragraph [0013], however, *also* describes:

In particular, the units can represent activities and/or results of these activities. A connection of activities and results such that orientation occurs from which it is apparent, *inter alia*, that an activity leads to a result and this result, if appropriate, again permits another activity is particularly advantageous.

One of skill in the art would understand that an activity that *leads* to a result is substantially a cause of the result. Conversely, the result is an effect of the activity, and the specification of record describes a cause-and-effect relationship between activities and results.

Moreover, as also described at paragraph [0013]:

In this way, a flowchart of activities which bring about results is produced, the wide variety of activities being able to act on a single event, and an event being able to be a precondition for a multiplicity of activities.

Since activities which bring about results are represented on a flowchart, one of skill in the art would understand that an activity that *brings about* a result is substantially a cause of the result. Conversely, the result is an effect of the activity, and the specification of record describes a cause-and-effect relationship between activities and results.

Furthermore, an event which is a *precondition* of an activity might be said to be a cause of the activities, while the activity might be said to be an effect of the event.

Moreover, as also described at paragraph [0013]:

It is to be noted here that in a complex technical system an unwieldy "network-like" representation quickly results from the mutual dependencies between activities and results (specific activities usually being permissible only after specific results which themselves in turn required other activities).

Since specific activities are permissible only after specific results, which themselves in turn required other activities, one of skill in the art would understand that an activity that *is required* by a result is substantially a cause of the result. Conversely, the result is an effect of the activity, and the specification of record describes a cause-and-effect relationship between activities and results.

The Examiner, similarly, summarizes paragraph [0031] of the specification of record, which corresponds to lines 9-15 at page 5 of the International Application, above as showing "that units are embodied as activities or results." Paragraph [0031], however, *also* describes:

If, for example, it is assumed that the units are embodied as activities and results, it is in particular interesting to determine which result directly follows which

activity, and/or which results directly precede the activity.

Since the units, i.e. the events, are embodied as activities and results, and a result directly *follows* from an activity, one of skill in the art would understand that an activity is substantially a cause of the result. Conversely, the result is an effect of the activity, and the specification of record describes a cause-and-effect relationship between activities and results.

The Examiner, similarly, summarizes paragraph [0038] of the specification of record, which corresponds to lines 4-9 at page 7 of the International Application, above as showing "results are selected and all the following activities are determined; results being predecessors of activities; activities give rise to results." Paragraph [0038], however, *also* describes:

It is apparent that activities 301, 302, 303 and 304 follow the result 102, the activity 301 giving rise to a result 305, the activity 302 giving rise to a result 306, the activity 303 giving rise to a result 307 and the activity 304 giving rise to results 308, 309 and 310,

Since, as noted by the Examiner, the activity 301 gives *rise* to the result 305, one of skill in the art would understand that the activity 301 is substantially a cause of the result 305. Conversely, the result 305 is an effect of the activity 301, and the specification of record describes a cause-and-effect relationship between activities and results.

The Examiner asserts further in section 10.1.1, in the first full paragraph at page 11 of the Examiner's Answer, that:

Based on the above description, it is clear that the engineering process comprises of numerous activities; the activities have predecessors and successors. Therefore, the activities are connected in a predecessor/successor relationship. Since the specification does not describe the cause-and-effect relationship, but describes the predecessor/successor relationship, **the Examiner has interpreted the cause-and-effect relationship to be same as the predecessor/successor relationship.**

To the contrary, since, as noted by the Examiner as discussed above, "an event being a precondition for a plurality of activities," "selecting a plurality of first units for which third units are determined from second units," and "activities give rise to results," the specification of record describes a cause-and-effect relationship between activities and results.

The Examiner asserts further in section 10.1.1, in the second full paragraph of page 11, that:

The relationship between the predecessors and successors is not described in the specification as cause-and-effect relationship. None of the references mentioned in the English translation of the International Application

PCT/DE00/00075 describe cause-and-effect relationship.

To the contrary, since, as noted by the Examiner as discussed above, "an event being a precondition for a plurality of activities," "selecting a plurality of first units for which third units are determined from second units," and "activities give rise to results," the specification of record describes a cause-and-effect relationship between activities and results.

Explicit support for claim language, moreover, is not required. It is well-settled, rather, that the test for compliance with the *description* requirement is whether a person skilled in the art would reasonably conclude from the disclosure whose filing date is being relied on that the inventor had possession, as of the filing date, of the claimed invention. See, e.g., *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563, 19 U.S.P.Q. 2d 1111, 1116 (Fed.Cir. 1991) and cases discussed therein. The test for compliance with the description requirement is analogous to the test for determining whether a reference anticipates a claim. Since a reference can anticipate a claim without describing the claimed invention in identical terms, a specification can describe an invention without using identical terms as well.

The Examiner, finally, asserts in section 10.1.1 at top of page 12, that:

Irrespective of how the applicant argues the relationship between activities in the activities network, the results, units and activities of the network are not affected. It is still only a predecessor successor relationship.

To the contrary, the Examiner himself has noted, as discussed above, "an event being a precondition for a plurality of activities," "selecting a plurality of first units for which third units are determined from second units," and "activities give rise to results." Thus, the results and the events are affected by the activities and so, even under the Examiner's own terms, the specification of record describes a cause-and-effect relationship between activities and results.

The Examiner has therefore failed to make out a *prima facie* case of lack of written description with respect to claims 5, 6, 7, 9, 11, 20 and 21. Appellant, therefore, requests respectfully that the rejection of claims 5, 6, 7, 9, 11, 20 and 21 be withdrawn.

2. Response to argument that independent claims 5, 6, 7, 11 and 21 are not anticipated by U.S. Patent No. 5,303,170 to Valko et al. (hereinafter "Valko").

The Examiner asserts in section 10.1.2, in the second full paragraph of page 13, that:

In addition, in the applicant's activity network of Fig. 2, there are numerous resources, Items 201 to 212 required for performing the activity 101, check and modify arrangement plan of the tender. Therefore, the availability of these resources is signaled to the activity 101 in Fig. 2 of the applicant's invention. The

use of resources as precondition for an activity and signaling the presence of the resources are in Applicant's Fig 2 and Fig. 3. All the dotted lines feeding into start of an activity are signaling the presence of resources required for starting that activity in the applicant's Fig. 2 and Fig. 3. The Applicant has exactly the same activity model as Valko reference.

According to the provisions of M.P.E.P. § 2131, a *reference* must teach every element of a claim to anticipate a claim. As provided therein:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Thus, in order to make out a prima facie case of anticipation of independent claim 21 by Valko, the Examiner would have to show that each and every element of independent claim 21 is found, either expressly or inherently, in *Valko*, not the Appellant's specification. Thus, whether the Appellant's *specification* describes, *inter alia* an activity model in the manner of the Valko reference is not relevant to whether *Valko* anticipates independent claim 21. Independent claim 21, moreover, is not anticipated by Valko because Valko fails to disclose all of the features of independent claim 21. Valko, for example, discloses no "preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship," as recited in the fifth clause of independent claim 21. Thus, the Examiner has failed to make out a prima facie case of anticipation of independent claim 21 by Valko, and the rejection of independent claim 21 ought to be withdrawn.

Section 10.1.3:

The Examiner asserts in section 10.1.3, in the third full paragraph of page 14, that:

Specification Page 1, Para 006 states, a first unit is connected to a set of second units in a predefined fashion; at least one third unit is determined from the set of second units, which has a relationship with the first unit; Page 2, Para 0011 states that the at least one third unit can be a predecessor or successor of the first unit. The Examiner takes the position that if the third unit that follows the second unit that follows the first unit is the predecessor of the first unit, then there is a feedback loop from the third unit to the first unit.

According to the provisions of M.P.E.P. § 2131, a *reference* must teach every element of a claim to anticipate a claim, as discussed above. Thus, whether the Appellant's *specification* describes, *inter alia* a first unit connected to a set of second units in a predefined fashion, or at least one third unit being determined from the set of second units, which has a relationship with the first unit, is not relevant to whether *Valko* anticipates independent claim 21. Independent

claim 21, moreover, is not anticipated by Valko because Valko fails to disclose all of the features of independent claim 21. Valko, for example, discloses no "preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship," as recited in the fifth clause of independent claim 21.

Section 10.1.4:

The Examiner asserts in section 10.1.4, in the third full paragraph of page 15, that:

The Examiner takes the position that in Fig. 2 of the application, the activity 101, check and modify arrangement plan of tender, waits for the resources 201 to 211 to be present. Only when these resources are available the activity 101 can occur. The applicant may choose to call the units 201 to 212 as results, but one of ordinary skill in the art will conclude that these are the resources required for performing activity 101. In the applicant's Fig. 2, activity 101 waits for the results or resources 201 to 212 to be present, for the start of the activity. If these resources are not present, activity 101 cannot occur. In Fig. 3 of the application the activities 301 to 304 wait for the resources fed into the small circles at the start of the arrows representing the activities. The Examiner interprets this to mean that the activities are waiting for the resources fed into the small circles at the start of the activity arrows.

According to the provisions of M.P.E.P. § 2131, a *reference* must teach every element of a claim to anticipate a claim, as discussed above. Thus, whether the Appellant's *specification* describes, *inter alia* an activity 101, is not relevant to whether *Valko* anticipates independent claim 21. Independent claim 21, moreover, is not anticipated by Valko because Valko fails to disclose all of the features of independent claim 21. Valko, for example, discloses no "preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship," as recited in the fifth clause of independent claim 21.

Section 10.1.5:

The Examiner asserts in section 10.1.5, at the bottom of page 16, continuing at top of page 17, that:

The applicant's activity network also uses signal lines to indicate the presence of predecessors to the activity as shown in Fig. 2 and Fig. 3. The signals going from predecessors 201 to 212 in Fig. 2, to the activity 101, that cause the activity 101 start.

According to the provisions of M.P.E.P. § 2131, a *reference* must teach every element of a claim to anticipate a claim, as discussed above. Thus, whether the Appellant's *specification* describes, *inter alia* signal lines, is not relevant to whether *Valko* anticipates independent claim 21. Independent claim 21, moreover, is not anticipated by Valko because Valko fails to disclose

all of the features of independent claim 21. Valko, for example, discloses no "preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship," as recited in the fifth clause of independent claim 21.

The Examiner asserts further in section 10.1.5, at the bottom of page 16, continuing at top of page 17, that:

The applicants have chosen to apply selective ignorance to argue the existence of the cause-and-effect relationship and lack of signals in their activity network and presence of signals in the Valko reference.

The Appellant, the contrary, has focused on that which is relevant, and ignored that which is not relevant, in a good-faith effort to show that the Examiner has failed to provide a prima facie case of anticipation of claim 21 by Valko. As discussed above, in order to make out a prima facie case of anticipation of independent claim 21 by Valko, the Examiner would have to show that each and every element of independent claim 21 is found, either expressly or inherently, in *Valko*, not the Appellant's specification. Thus, whether the Appellant's *specification* describes signals in addition to, inter alia a cause-and-effect relationship is not relevant to whether *Valko* anticipates the claimed invention. The Appellant has consequently pointed out that *all* Valko shows in Fig. 1 is a network shown is made up of a plurality of activities 102-112 selectively connected with one another by way of signal lines, and thus does not show "preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship," as recited in independent claim 21.

The Examiner asserts further in section 10.1.5, at the bottom of page 16, continuing at top of page 17, that:

In Fig. 3 of the application, the predecessors of the activities 301 to 304, *viz.*, the resources feeding into the small circles at the start of the arrows of the activities indicate to the activities the presence of the results. The Examiner interprets the resources feeding into the small circles as sending signals (in computer implementation, an interrupt or a polling has to occur, to verify the existence of the resources or results) to the activities 301 to 304, so the activities can start executing.

According to the provisions of M.P.E.P. § 2131, a *reference* must teach every element of a claim to anticipate a claim, as discussed above. Thus, whether the Appellant's *specification* describes, inter alia the predecessors of the activities 301 to 304, is not relevant to whether *Valko* anticipates independent claim 21. Independent claim 21, moreover, is not anticipated by Valko because Valko fails to disclose all of the features of independent claim 21. Valko, for

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example, discloses no "preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship," as recited in the fifth clause of independent claim 21.

Accordingly, because Valko fails to disclose all of the features of independent claim 21, the Examiner has failed to set forth a prima facie case of anticipation of independent claim 21 by Valko. Appellant, therefore, requests respectfully that the rejection of independent claim 21 be withdrawn.

Respectfully submitted,

STAAS & HALSEY LLP

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By: /Thomas E. McKiernan/

Thomas E. McKiernan

Registration No. 37,889

1201 New York Avenue, NW, 7th Floor

Washington, D.C. 20005

Telephone: (202) 434-1500

Facsimile: (202) 434-1501